

Key to species of Dermestidae (Coleoptera) recorded from the island of New Guinea

JIRÍ HÁVA

Private Entomological Laboratory and Collection, Rýznerova 37/37, CZ-252 62, Únětice u Prahy, Praha-západ, Czech Republic; jh.dermestidae@volny.cz

Abstract: Species of Dermestidae (Coleoptera) known from Papua New Guinea and Indonesian Papua were keyed. Two new records from Papua New Guinea - *Anthrenus* (s. str.) *oceanicus* Fauvel, 1903 and *Evorinea iota* (Arrow, 1915) - were presented.

Key words: Coleoptera, Dermestidae, New Guinea, faunistics, identification key, checklist.

Introduction

The family Dermestidae contains about 1400 species and subspecies worldwide (Háva 2003; 2010). From New Guinea (both Papua New Guinea and Indonesian Papua), 13 species are known, including two new records presented in this publication.

Dermestid larvae feed mainly on animal substances, but a few are able to live partly or completely on plant substances. Although sometimes found in numbers on vegetable material, they may be feeding also on dead insects. In the wild dermestids may occur in and around webs of spiders and caterpillars, in nests of social insects, as also mammals and birds, on carrions or under tree bark. Rarely, imago are being observed in the very same habitats with their larvae and also feed on the same substances. But in most cases imago do not feed at all or, if they have access to

flowering plants, they may feed on pollen and nectar (facultative anthophily). Some dermestid species occurs in natural habitats only, other species live partly in the wild and partly synanthropic.

Recently, Háva (2004) published key to World genera and subgenera family Dermestidae. But according to Lawrence & Slipinski (2005) and Kiselyova & McHugh (2006) cladistic-based analysis of higher range taxa within the family Dermestidae, six subfamilies should be recognized: Dermestinae (including Marioutinae), Thorictinae, Trinodinae (including Thylodriinae), Orphilinae, Attageninae, and Megatominae.

Key to the species

Below an original identification key to species of Dermestidae recorded from New Guinea is presented for the first time.

- 1 Median ocellus on front absent 2
- Median ocellus on front present 3
- 2 Abdominal sternites with black and white pubescence (Fig. 1); apex of each elytron with a tooth
..... *Dermestes (Dermestinus) maculatus*
- Abdominal sternites with unicolorous pubescence, cuticle bicolorous, brown with black spots (Fig. 2)
..... *Dermestes* (s. str.) *ater*
- 3 Pronotum with strong raised ridge near side margin in basal half; antennal club 1-2 segmented; body covered by very long, erected setation *Evorinea iota*
- Pronotum without strong raised ridge near side margin in basal half 4
- 4 Prosternum not forming a „collar“, therefore mouthparts free; hypomeron without a distinct antennal cavity 5
- Prosternum forming a „collar“, under which mouthparts fit when head is retracted; hypomeron with a distinct antennal cavity 6
- 5 Body robust, dark brown to black with elytral, small, spots of grey pubescence
..... *Attagenus (Aethriostoma) irroratus*



– Body small, light brown with elytral, transverse fasciae and spots of yellowish pubescence	<i>Attagenus (Aethriostoma) undulatus</i>
6 Dorsal and ventral surfaces covered by flat scales	7
– Dorsal and ventral surface covered by pubescence	8
7 Each elytron covered by yellowish-orange scales with more white, small spots of white scales	<i>Anthrenus (s. str.) flavipes flavipes</i>
– Each elytron with broad, transverse fasciae of white scales	<i>Anthrenus (s. str.) oceanicus</i>
8 Body usually broad. Apical antennal segment oval or circular and broader	9
– Body oval. Antennal club composed of three segments, terminal segment narrow	<i>Anthrenocerus australis</i>
9 Antennal club composed of two segments	10
– Antennal club composed of three segments	12
10 Each elytron with single transverse orange-reddish fascia and apical spot	11
– Each elytron with more than one reddish spot and fascia	<i>Orphinus testaceipes</i>
11 Apical spot very large, transverse elytral fascia broad	<i>Orphinus biroi</i>
– Apical spot small, transverse elytral fascia narrow	<i>Orphinus fasciatus</i>
12 Pubescence on dorsal and ventral surface black and light blue. Blue pubescence is forming one large median spot on each elytron	<i>Thaumaglossa boana</i>
– Pubescence on dorsal and ventral surface grey. Grey pubescence is forming transverse fasciae on each elytron ..	<i>Thaumaglossa nigricans</i>

New records of Dermestidae from New Guinea

***Anthrenus (s. str.) oceanicus* Fauvel, 1903** (Fig. 3)

Material examined: Papua New Guinea, Wau, 4000 ft., 30.vi.1974, 2 exx., J. Háva det. et coll.

Distribution: Species known from Europe (introduced): Czech Republic, England, Africa (introduced): Congo, Egypt, Mauritius, Nigeria, North America: Hawaiian Is., Asia: China: Guangdong, India: Andhra Pradesh, Tamil Nadu, Indonesia: Java, Madura, Malaysia, Pakistan, Sri Lanka, Taiwan, Australia, New Caledonia. First record from Papua New Guinea.

***Evorinea iota* (Arrow, 1915)**

Material examined: Papua New Guinea, Wau, 4000 ft., 30.vi.1974, 1 male., J. Háva det. et coll.

Distribution: Species known from Japan, Reunion, Philippines, Sumatra, Taiwan, Thailand, Vietnam, Caroline Is., West Papua, Kiribati (Gilbert Is.), Mariana Is., Palau, Ponape, Tanimbar Is., Tonga, Truk. First record from Papua New Guinea.

List of Dermestidae from New Guinea

All species of Dermestidae previously recorded from New Guinea are listed alphabetically (table 1).

Table 1. Annotated checklist of Dermestidae from New Guinea.

Taxa	Indonesian Papua	Papua New Guinea
Subfamily Attageninae		
Tribe Attagenini		
Genus Attagenus Latreille, 1802		
Subgenus <i>Aethriostoma</i> Motschulsky, 1868		
<i>Attagenus (Aethriostoma) irroratus</i> (Blackburn, 1903)	X	
<i>Attagenus (Aethriostoma) undulatus</i> (Motschulsky, 1858)	X	
Subfamily Dermestinae		
Tribe Dermestini		
Genus Dermestes Linnaeus, 1758		
Subgenus <i>Dermestes</i> Linnaeus, 1758		
<i>Dermestes (s. str.) ater</i> DeGeer, 1774	X	X
<i>Dermestes cadaverinus</i> Fabricius, 1775		
<i>Dermestes domesticus</i> Germar, 1824		



Taxa	Indonesian Papua	Papua New Guinea
Subgenus <i>Dermestinus</i> Zhantiev, 1967		
<i>Dermestes</i> (<i>Dermestinus</i>) <i>maculatus</i> DeGeer, 1774	X	X
<i>Dermestes vulpinus</i> Fabricius, 1781		
Subfamily Megatominae		
Tribe Anthrenini		
Genus <i>Anthrenus</i> Geoffroy, 1762		
Subgenus <i>Anthrenus</i> Geoffroy, 1762		
<i>Anthrenus</i> (s. str.) <i>flavipes flavipes</i> LeConte, 1854		X
<i>Anthrenus vorax</i> Waterhouse, 1883		
<i>Anthrenus</i> (s. str.) <i>oceanicus</i> Fauvel, 1903		X
Tribe Megatomini		
Genus <i>Anthrenocerus</i> Arrow, 1915		
<i>Anthrenocerus australis</i> (Hope, 1843)	X	
Genus <i>Orphinus</i> Motschulsky, 1858		
<i>Orphinus biroi</i> Pic, 1956	X	
<i>Orphinus fasciatus</i> (Matsumura et Yokoyama, 1928)	X	
<i>Orphinus testaceipes</i> (Pic, 1915)	X	
Genus <i>Thaumaglossa</i> Redtenbacher, 1867		
<i>Thaumaglossa boana</i> Háva, 2000	X	X
<i>Thaumaglossa nigricans</i> (MacLeay, 1871)		X
Subfamily Trinodinae		
Tribe Trinodini		
Genus <i>Evorinea</i> Beal, 1961		
<i>Evorinea iota</i> (Arrow, 1915)	X	X

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Figure 1. Abdominal sternites of *Dermestes (Dermestinus) maculatus* DeGeer, 1774.

Figure 2. Abdominal sternites of *Dermestes (s. str.) ater* DeGeer, 1774.



Figure 3. Habitus of *Anthrenus (s. str.) oceanicus* Fauvel, 1903.

